

CLAIMS:

1. A guide device for use with a spinal plate having at least one pair of screw bores formed therein, the guide device comprising:
 - an elongate shaft having a proximal end and a distal end;
 - a guide member coupled to the distal end of the elongate shaft and including first and second lumens extending therethrough in fixed relation to one another; and
 - at least one alignment element positioned distal of the guide member, the at least one alignment element being adapted to interact with a spinal plate to position the guide member with respect to the spinal plate such that the first and second lumens in the guide member are aligned with a pair of corresponding screw bores formed in the spinal plate.
2. The guide device of claim 1, wherein the at least one alignment element comprises at least one tab that extends distally from the guide member.
3. The guide device of claim 2, wherein the at least one tab is adapted to non-fixedly interact with a spinal plate to align the guide member with the spinal plate.
4. The guide device of claim 2, wherein the at least one tab comprises opposed first and second tabs that extend distally from the guide member, the first and second tabs being movable between an open position, and a closed position wherein the tabs are adapted to engage opposed edges of a spinal plate.
5. The guide device of claim 2, wherein first and second opposed alignment tabs extend from opposed outer edges of the guide member at positions that are substantially between the first and second lumens.
6. The guide device of claim 2, wherein first and second opposed alignment tabs extend from opposed outer edges of opposed ends of the guide member such that the first and second lumens are positioned between the first and second alignment tabs.

7. The guide device of claim 1, wherein the at least one alignment element comprises at least one tab that extends distally from the guide member and that is adapted to interact with an edge of a spinal plate, and at least one protrusion that extends distally from the guide member and that is adapted to be disposed within a corresponding bore formed in the spinal plate.
8. The guide device of claim 1, wherein the at least one alignment element comprises an alignment tab that extends distally from a distal surface of the guide member and that is adapted to be disposed within a corresponding slot formed in a spinal plate.
9. The guide device of claim 1, wherein the at least one alignment element is adapted to prevent rotation between the guide member and a spinal plate when the guide member is mated to the spinal plate.
10. The guide device of claim 9, wherein the at least one alignment element comprises an oval protrusion that extends distally from a distal end of the guide member.
11. The guide device of claim 1, wherein the guide member has a substantially rectangular, elongate shape and the first and second lumens extend therethrough.
12. The guide device of claim 11, wherein the guide member includes opposed superior and inferior sides and opposed transverse sides, the transverse sides having a width that is less than a width of the superior and inferior sides.
13. The guide device of claim 12, wherein the at least one alignment element comprises a first alignment tab that extends distally from the superior side of the guide member and a second alignment tab that extends distally from the inferior side of the guide member.
14. The guide device of claim 13, wherein at least one of the tabs is configured to interact with a graft window formed in a spinal plate.

15. The guide device of claim 12, wherein the at least one alignment element comprises first and second alignment tabs that extend distally from opposed transverse sides of the guide member.

16. The guide device of claim 1, wherein a distal surface of the guide member has a shape that conforms to the shape of a spinal plate.

17. The guide device of claim 1, wherein the first and second lumens are positioned at an angle with respect to one another.

18. The guide device of claim 1, wherein the guide member comprises a first barrel having a lumen extending therethrough, and a second barrel having a lumen extending therethrough.

19. The guide device of claim 18, wherein the first and second barrels are positioned at an angle with respect to one another.

20. The guide device of claim 1, wherein the at least one alignment element is formed on a support member that is coupled to the distal end of the elongate shaft, and the at least one alignment element is adapted to removably engage a spinal plate.

21. The guide device of claim 20, wherein the guide member is slidably movable along the support member such that a position of the guide member with respect to a spinal plate engaged by the support member is adjustable.

22. The guide device of claim 21, further comprising an engagement mechanism formed on a distal end of the elongate shaft and adapted to releasably engage the support member such that the position of the guide member can be temporarily fixed.

23. The guide device of claim 22, further comprising a trigger mechanism formed on the proximal end of the elongate shaft and coupled to the engagement mechanism for moving the engagement mechanism between an engaged position, wherein the guide member is fixed at a

desired position, and a released position, wherein the guide member is slidably movable along the support member.

24. The guide device of claim 20, wherein the support member is arch-shaped and the at least one alignment element comprises first and second substantially concave grooves formed on opposed inner surfaces of the support member.

25. The guide device of claim 1, wherein the at least one alignment element is adapted to loosely interact with a spinal plate such that the guide member can pivot with respect to the spinal plate.

26. The guide device of claim 1, wherein the first and second lumens have an adjustable length.

27. The guide device of claim 1, wherein the proximal end on the elongate shaft is positioned at an angle with respect to a distal portion of the elongate shaft.

28. A guide device for use with a spinal plate having at least one screw bore formed therein, the guide device comprising:

an elongate shaft having a proximal end and a distal end; and

a guide member coupled to the distal end of the elongate shaft and including at least one lumen extending therethrough; and

at least one alignment tab extending distally from the guide member, the alignment element being adapted to non-fixedly interact with a spinal plate to position the guide member with respect to the spinal plate such that the at least one lumen in the guide member is aligned with at least one corresponding screw bore formed in the spinal plate.

29. The guide device of claim 28, wherein the guide member includes first and second opposed alignment tabs extending distally therefrom.

30. The guide device of claim 29, wherein at least one of the first and second alignment tabs is configured to interact with a graft window formed in a spinal plate.

31. The guide device of claim 29, wherein the guide member includes first and second lumens extending therethrough, and the first and second opposed alignment tabs extend from opposed outer edges of the guide member at positions that are substantially between the first and second lumens.

32. The guide device of claim 29, wherein the guide member includes first and second lumens extending therethrough, and the first and second opposed alignment tabs extend from opposed outer edges of opposed ends of the guide member such that the first and second lumens are positioned between the first and second alignment tabs.

33. The guide device of claim 28, wherein the guide member comprises at least one barrel having a lumen formed therein.

34. The guide device of claim 33, wherein the barrel has an adjustable trajectory such that the barrel can pivot about a point on a longitudinal axis thereof.

35. A spinal fixation kit, comprising:

a spinal plate having at least one screw bore formed therein for receiving a fastening element effective to mate the spinal plate to at least one vertebrae, and at least one graft window formed therein; and

a guide member having at least one lumen extending therethrough, and at least one alignment element, at least one of the alignment elements being adapted to interact with the graft window in the spinal plate to align the at least one lumen in the guide member with the at least one screw bore formed in the spinal plate.

36. The kit of claim 35, wherein the spinal plate includes at least one pair of opposed screw bores formed therein and the guide member includes first and second lumens extending therethrough.

37. The kit of claim 36, wherein the at least one alignment element comprises first and second alignment tabs that are adapted to align the first and second lumens with one pair of opposed screw bores formed in the spinal plate.

38. The kit of claim 37, wherein the spinal plate includes opposed superior and inferior edges and opposed lateral edges, the at least one pair of opposed screw bores being positioned laterally adjacent to one another between the opposed lateral edges.

39. The kit of claim 35, wherein the at least one alignment element comprises at least one tab and at least one protrusion.

40. The kit of claim 37, wherein the guide member includes opposed superior and inferior sides and opposed transverse sides, the transverse sides having a width that is less than a width of the superior and inferior sides.

41. The kit of claim 40, wherein the first alignment tab extends distally from the superior side of the guide member and the second alignment tab extends distally from the inferior side of the guide member.

42. An adjustable guide device for use with a spinal plate, comprising:
an elongate shaft having a proximal end and a distal end that is slidably coupled to a support member, the support member being adapted to rigidly engage a spinal plate; and
a guide member coupled to a distal portion of the elongate shaft and including at least one lumen extending therethrough that is adapted to be aligned with a corresponding screw bore in a spinal plate when the support member is engaged to a spinal plate.

43. The adjustable guide device of claim 42, wherein the support member comprises an arch-shaped support member.

44. The adjustable guide device of claim 43, wherein the distal end of the elongate shaft is slidably mated to the arch-shaped support member.

45. The adjustable guide device of claim 44, further comprising an engagement mechanism formed on the distal end of the elongate shaft and adapted to releasably engage the support member such that the angle of the guide member can be temporarily fixed.

46. The adjustable guide device of claim 45, further comprising a trigger mechanism formed on the proximal end of the elongate shaft and coupled to the engagement mechanism for moving the engagement mechanism between an engaged position, wherein the guide member is fixed at a desired position along the support member, and a released position, wherein the guide member is slidably movable along the support member.

47. The adjustable guide device of claim 42, wherein first and second opposed ends of the support member include a substantially concave groove formed on an inner surface thereof and adapted to seat and removably engage opposed edges of a spinal plate.

48. A spinal fixation kit, comprising:

a spinal plate having a plurality of longitudinally spaced screw bore regions formed therein, each screw bore region containing a pair of laterally spaced screw bores positioned between opposed, transversely extending guide contact surfaces; and

a guide member having a pair of guide lumens formed therethrough, and opposed alignment elements formed thereon in fixed relation to one another such that the opposed alignment elements can interact with opposed guide contact surfaces in any one of the plurality of screw bore regions to align the pair of guide lumens in the guide member with a pair of screw bores in the spinal plate.

49. The kit of claim 48, wherein a distance between opposed guide contact surfaces is the same in each screw bore region of the spinal plate.

50. The kit of claim 48, wherein the spinal plate includes at least one graft window formed therein and positioned between two pairs of screw bores.

51. The kit of claim 50, wherein at least one of the opposed guide contact surfaces in each screw bore region is a transversely extending edge of the graft window.